

A DIACHRONIC APPROACH TO THE OLD SPANISH SIBILANT MERGER AND ITS IMPACT ON TRANS-ATLANTIC SPANISH (PART I)

RECONSIDERANDO LA CONFUSIÓN DE SIBILANTES EN ESPAÑOL: APLICACIONES CRONOLÓGICAS Y REPERCUSIONES EN EL ESPAÑOL TRANSATLÁNTICO (PARTE I)

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Abstract

The evolution of the medieval sibilant phonetic system is indispensable in understanding how original Castilian expanded and evolved on both sides of the Atlantic. At the same time, it helps to distinguish varieties such as Andalusian Spanish, trans-Atlantic Spanish, and Judeo-Spanish, which in many ways constitutes proof of all the diachronic processes happening during and after the late medieval period. The sibilant merger and its resulting graphic confusion represent a crucial chapter in the development of Spanish. This study offers an extensive overview of the evidence, chronology, dialectal divergence, theories of causation, and phonetic background of this merger. Condensing what prior scholarship has already established, it helps the reader understand how the sibilant system evolved into its modern realization. It explores the origins and different steps in their complex evolution. Lastly, it evaluates the most recent research on the history of these phonetic changes.

Keywords: Historical linguistics; sibilant merger; Andalusian Spanish; Trans-Atlantic Spanish; devoicing; *seseo*; *distinción*.

Resumen

El seguimiento de la evolución de las sibilantes del español medieval resulta imprescindible para seguir la expansión y configuración del español a ambos lados del Atlántico. La distribución de las sibilantes (según el rasgo sordo y sonoro) y su fusión sientan los cimientos para distinguir variedades como el andaluz, el español trasatlántico, el judeoespañol y otras lenguas romances. Esta investigación recapitula la polémica de las distintas fases cronológicas, atiende sus implicaciones geográficas, puntualiza la regularización ortográfica resultante, así como nos hace reflexionar sobre el problema de la desonorización. Basándonos en rimas de la época, la opinión de gramáticos y tratadistas y considerando las últimas publicaciones, el valor de este artículo radica en su propósito de divulgación para acoger datos filológicos recientes y esclarecer conclusiones sobre este fenómeno fonético, primordial en la historia lingüística romance.

Palabras clave: Lingüística diacrónica; confusión de sibilantes; andaluz; español trans-Atlántico; desonorización; seseo; distinción.

Part I: Retrospectives.

The evolution of the medieval sibilant phonetic system is crucial to understanding the origin of Castilian varieties on both sides of the Atlantic. It helps to distinguish varieties such as Andalusian Spanish, Judeo-Spanish, and trans-Atlantic Spanish, which constitute proof of many of the diachronic processes happening during and after the late medieval period. This study helps the reader understand the linguistic variations of the sibilants in the modern language, and explores the origins and different steps in their evolution; furthermore, it evaluates recent research about the timeline of these phonetic changes.

The reorganization in the sibilant paradigm greatly altered the configuration of the Spanish language as we know it today. It also made this language unique compared to other Romance languages that still maintain certain similarities with the old medieval Spanish sibilant system. These transformations happened at different stages and contexts throughout long periods of time, mainly between the fifteenth and seventeenth centuries.

The old medieval sibilants present seven phonemes, distributed in the following pairs, according to their voiceless or voiced, and fricative or affricate features:

Fricatives:	/s/ - /z/	/ʃ/ - /ʒ/
Affricates:	/ts/ - /dz/	/tʃ/

The voiceless/voiced sound pairs [s]~[z], [ʃ]~[ʒ], and [ts]~[dz], went through various consonant mutations such as devoicing (loss of the voiced sound), weakening of the affricates (spirantization), and most recently, interdentalization, and velarization, processes unique to Spanish amongst other peninsular and Latin derived languages.

Studying the spoken language in the far past is a difficult task as the recorded manuscripts and data written in Spanish from those centuries are not always reliable. Phonetic changes happening in the spoken language were hardly represented in written form during those early periods, especially before the fifteenth century, and more specifically before the invention of the printing press in 1440. After that date, printing accelerated the spread of culture and the printed word, giving us a record of what was occurring at the oral level. However, many times the orthography did not correspond chronologically to the spoken language. Following a conservative tradition of what was considered to be the scholarly tendency in a given region, the written language did not always match the reality and practicality of the spoken language. Therefore, the study of the evolution of sibilants, based on old texts, rhymes, and records from grammarians and authors from that time presents a challenge and is in many ways restricted to few documents. The main resources used here come from old poems, written texts from medieval authors, and opinions documented by linguists between the fifteen and seventeenth centuries. Thanks to these resources (useful but limited), some benchmarks have been established to indicate the initial changes, the expansion, and generalization, which resulted in the loss of the phonemic distinction between those pairs.

The further we go back in time, the more difficult it is to obtain accurate information about the chronological evolution of a specific phonetic change. The number of written resources decreases, as does their readability and authenticity. Diachronic analysis presents multiple difficulties, especially due to the lack of correspondence between the articulatory pho-

netic changes happening in the spoken language and their written form. To study the evolution of sibilants, the oldest resources we have are written documents and rhymes, and authors' opinions from the fifteenth-century. The study of this phenomenon has advanced thanks to these written records; however, the accuracy of these documents could prove to be insufficient, as we all know that the written language does not always correspond to the spoken language. Besides, writers' opinions and style could be influenced by their own perception of what they believed or desired the standard language to be.

Analyzing the sibilants' evolution using old written testimonies presents some methodological obstacles: first, due to the lack of sufficient graphic documentation showing changes in the spoken language; and second, due to the inaccuracy of these written texts with regards to the chronology of the phonetic change. Nevertheless, and based on the generally accepted hypothesis that the sibilant changes date back to the sixteenth-century, this study roots its conclusions in those first written literary manuscripts, including poetic rhymes, and in the later printed testimonies of grammarians and scholars.

Spoken language analysis for distant historical periods presents many challenges for gathering textual evidence. There are many factors to be taken into account, such as the limited number of surviving documents, restricted access to them, unreadable original scripts (many handwritten), the reliability of true originals versus copies, the deciphering of texts and spelling errors, arbitrary punctuation (far from modern norms), and the variability of scribes' writing customs (mainly based on birth origin and scribal school tradition). Let us add that this lack of standardization in style, including spelling, paragraphs, use of space and capitals, differs greatly from present conventions. Nevertheless, and despite the misleading relationship between writing and speech, these old texts are our only evidence for determining five century old language practices. Bearing these challenges in mind, this diachronic approach discusses the timing of the readjustment of sibilants, which certainly brings up some dissension among current academics, and how significant it was to the emerging Spanish varieties, especially those in the south of the peninsula with their trans-Atlantic projection.

There is a substantial corpus of research on the devoicing and development of Spanish sibilants (Espinosa 1935, Catalán 1957, Dámaso Alonso

1962, Amado Alonso 1967, Martinet 1955, Malkiel 1971, Parodi 1976, Lloyd 1987, Harris-Northall 1992, Pensado 1993, Penny 1993, Galmés 1962, among many others). It is not within the scope of the present article to analyze every single aspect of the historical complexity of this phonetic revolution, but to present an updated and straightforward diachronic synopsis that considers the implications of the timing for the trans-Atlantic expansion of the language¹.

1. Retrospectives and perspectives: origins

According to written evidence, the testimonies of multiple grammarians, and the traditional philologists' hypotheses, Old Spanish distinguished three sibilant pairs with voicing contrast up until the sixteenth century.

Voiceless	Voiced
/s/	/z/
/ʃ/	/ʒ/
/ts/	/dz/

Table 1. Voiceless and voiced sibilant phonemes.

These six phonemes were represented by the following graphemes in orthography:

- /s/ voiceless alveolar fricative, was written as <ss> as in *passo* 'step', *passar* 'to pass';
- /z/ voiced alveolar fricative, was represented as <s>, mostly in intervocalic position although also in other word interior positions; e.g. *rosa* 'rose';
- /ʃ/ voiceless alveopalatal fricative, was written as <x> as in *dixo* 's/he said';
- /ʒ/ voiced alveopalatal fricative was represented by <j, g> as in *fijo* 'son', *mugier* 'woman';
- and finally, dento-alveolar affricates /ts/ and /dz/ were written as

¹ The main scope is to frame the modern Spanish system of sibilants within an updated perspective in diachronic linguistics without engaging in the false myth of *ceceo* based on a king who had a lisp, which society tried to emulate as a prestige marker. See Guitarte (1992 and 1987) and González Ollé (1987) to read more about this fabled Spanish "lisp".

<c, ç> and <z> respectively, so *decir* ‘descend’ and *dezir* ‘say’ constitute a minimal pair, denoting different meanings.

The distinction among these sibilant phonemes could differentiate such words as *casa* ‘house’, *caxa* ‘box’ and *caça* ‘hunt’; *fixo* ‘fixed’ and *fijo* ‘son’.

examples	decir	dezir	passo	casa	fixo	fijo
graphs	ç, c ^{e,i}	z	-ss-	-s-	x	j, g ^{e,i}
phonemes	/ts/	/dz/	/s/	/z/	/ʃ/	/ʒ/

Table 2. Examples of medieval sibilant phonemes.

Even though these orthographic tendencies were in place, the written form often presented many spelling errors, some of which could show the training of the scribes, their different levels of literacy, or the changes occurring in the spoken language. This was a period in which standardization was incomplete, so spelling errors were still common. Frequent errors found across many conventional texts could indicate the historical state of the language; however, isolated errors did not necessarily represent changes in the spoken language. On the other hand, scribes, transcribers, or editors, when writing or copying a manuscript, might have taken some liberties to regularize the spelling, changing the original spelling to what they thought was right at the time. There was not always faithful copying of the original manuscript versions. Kauffeld (2016: 184) gives us a very specific example of these transcription practices that affect the analysis of Old Spanish sibilants. She states that there were two variations of the Greek sigma, ζ and σ, used extensively and indiscriminately for the graphs <ç, s, -ss->, and <z> in the fourteenth and fifteenth-century manuscripts. This graphic trait may have caused great confusion for transcribing later editions, at a time when the sibilant system was already changing in the spoken language. Words such as *poso/pozo*, *casa/caza*, *decir/dezir* might have been misspelled due to the interpretation of sigmas used indiscriminately as in *poço* or *poσο*, *caça* or *caσα*, *deçir* or *deσir*. Many transcribers chose to follow etymology to represent sigmas; others freely adhered to the visual impression, to whether the graph looked like an <s> or like a <z>. The word *caça* ‘hunt’ could have been transcribed as *casa* or *caza*

depending on the visual perception of the scribe. These writing practices add more misinterpretations to the study of the sibilant merger in its early stages.

We must also consider that most of the manuscripts that survived were related to official, judicial, or literary matters. Therefore, they were written in a formal register, far from the spoken language of the time. They were also written by a very select group of the total population, those that could read and write, very few in medieval times. Those scribes did not represent the mass population nor the language spoken by the vast majority.

The invention and spread of the printing press during the end of the fifteenth century helped to speed the dissemination of written texts without the laborious, intensive, and long process of copying by hand. The faster production of printed texts required certain standardization of the language related to the use of lower and upper-case letters, punctuation, symbols, and spelling. There was a demand for the standardization of the written language among the printing houses, and for having grammar manuals with orthographic guidance at a time when Castilian was far from being standardized. In many ways, printing facilitated the study of language processes in the sixteenth century, where we find more documented sources by authors and contemporary scholars. This was a time when many transitions were happening in the sibilant system.

Aside from the Old Spanish graphemes, if we look back at written sources in Latin, these six sibilants occurred in the following environments, examples adapted from Boyd-Bowman (1980: 11).

- a. Sound [s] in Old Spanish came from Latin s or ss in all positions (except in those for [z]) as in SALEM > *sal* ‘salt’, PASSATUM > pasado ‘past’, FALSUM > *falso* ‘false’, MUROS > muros ‘walls’.
- b. Sound [z] in Old Spanish was the pronunciation of Latin s in intervocalic position, e.g. ROSAM > *rosa* ‘rose’; or before a voiced consonant as it is in modern Spanish *cosmos* (from COSMœ).
- c. Sound [ts] was the pronunciation in Old Spanish for Latin CE, CI in initial or strong position, and for the combination of consonant plus CE, CI, DE, DI and TE, TI, and for sporadic merging with [s], e.g. CENTUM > *ciento* ‘hundred’, MARTIUM > *marzo* ‘March’, SERARE > *cerrar* ‘to close’.
- d. [dz] in Old Spanish came from Latin CE, CI, TE, TI between vowels

- and from GE, GI preceded by *n* or *r*, e.g. FACERE > *hacer* ‘to do’, PUTEUM > *pozo* ‘well’, ARGILLAM > *arcilla* ‘clay’.
- e. Sound [ʃ] was realized in Old Spanish for Latin X, PSE, PSI, SSE, SSI, or for Arabic shin (Boyd-Bowman 1980: 10). E.g. in AXEM > *eje* ‘axis’, CAPSEAM > *caxa, caja* ‘box’, BASSIU > *baxo, bajo* ‘low’. There are some cases of merger between Old Spanish [s] and [ʃ] as in SAPONEM > *xabón, jabón* ‘soap’, SEPIAM > *xibia, jibia, sepia* ‘cuttlefish’, *wa sa Allah* > *oxalá, ojalá* ‘God willing’.
 - f. [ʒ] in Old Spanish came from Latin C’L, G’L, LI and from J before *o* or *u*. E.g. OC(U)LUM > *ojo* ‘eye’, FOLIAM > *hoja* ‘leaf’, JUVENEM > *joven* ‘young’. Also, there are some cases of initial Latin I in strong position as in IAM MAGIS > *jamás* ‘never ever’, IUDAEUM > *judio* ‘Jew’ (Boyd-Bowman 1980: 71).
 - g. From late Vulgar Latin until the early stages of Castilian, these sound groupings underwent many changes, with the resulting drastic reduction of the sibilant system in the sixteenth century. By no means were these changes carried out uniformly in the peninsula; they went through considerable vacillation before they were standardized depending on the social and geographical proximity of the regions to the Castilian variety. The only sibilants not affected were the alveolar /s/ and the alveopalatal /tʃ/ as in modern *oso* ‘bear’ and *chico* ‘small’ respectively.

1.1. Possible causes for the devoicing and the unstable sibilant patterns

The loss of voiced sibilants in medieval Spanish exemplifies one of the most important sound changes in the evolution of the language, with extraordinary repercussions in its trans-Atlantic journey. Besides the prepalatal sound [tʃ], which did not undergo any modifications, along with its voiced correspondent [dʒ] (kept as a context variable soundan allophone of the current palatal phoneme /j/), Old Spanish presented six other sibilant consonants, contrasting with each other by the feature of voicing. In the Castilian territories, four of these six consonant sounds [s], [z], [ts] and [dz], were reduced to two, [s] and [θ], as in *coser/cozer*. In the south, in what is known today as Andalusian Spanish, the dominant and most widespread result was [s] for the standard *seseo* (versus the stigmatized dental sibilant [ʃ] for the *ceceo* variety, similar but not identical to the standard Castilian [θ]). The other pair [ʃ] and [ʒ] merged into a non-sibilant

velar sound [x] as in modern *gente*. Both resulting sounds [θ] and [x] are unique to standard peninsular Spanish in the family of Romance languages. While with interdental sound [θ] there was an articulatory advance in the point of contact to between the teeth, from [ts], [dz] to [ʃ] to [θ]; with velar sound [x] there was a retreat all the way back to the velar area from the alveopalatal points of sounds [ʃ] and [ʒ].

The resulting modern sound [s] from the medieval sibilant inventory (of [s]~[z] in the north, together with [ts]~[dz] in the south) is articulated differently according to its origins in northern or southern peninsular dialects. Among the many resulting variations, apicoalveolar, laminodental, laminoalveolar (Quilis 1993: 283), the pronunciation of <s> tends to be (apico)alveolar in Northern Spain [s̺], and (dorso)alveolar in most of Andalusia and Latin America [s]².

Evolution of Old Spanish sibilants		
/s/~/z/	> /s/ in Andalusian & Latin American Spanish	> alveolar [s]
/ts/~/dz/		
/s/~/z/	> /s/	> (apico)alveolar [s̺]
/ts/~/dz/	> /θ/ in Castilian as in <i>masa/maza</i> , minimal pair	
/tʃ/	> /tʃ/ as in <i>chico</i>	
/ʃ/~/ʒ/	> /x/ as in <i>general</i>	

Table 3. Evolution of Old Spanish sibilants

There is no clear explanation as to why these changes happened only in this variety of Latin in the northern part of the peninsula and not in other Romance languages. Many experts attribute this merger to a very general tendency of phonetic weakening in the first stages, and eventually, to creating a greater distinctiveness among consonants (Penny 2002: 101). The loss of sibilant voicing contrast that developed in the varieties of Late Latin spoken on the Iberian Peninsula is widely accepted as a consequence

² See Aleza (2010: 63) for the multiple variations of the pronunciation of sound [s] in América, e.g. it is apicoalveolar in Guatemala, rural parts of Honduras, Bolivian plains, inland Colombia, etc.

of the intra-linguistic consonant assimilation, weakening, and articulatory relaxation occurring in the Western Romance territories.

The process of weakening, or reduction in articulatory effort, is considered 'lenition'. This term, coined by Thurneysen, describes consonant conditioning which is caused by a reduction of the energy employed in their articulation, and mostly affects consonants in intervocalic position

(1946: 74). In this phonetic process, every consonant assumes a new (weaker) articulation, especially when it is surrounded by open articulations, mostly vowels and *w*, but also, when followed by *l*, *r*, *n*, (Martinet 1952: 192). It corresponds to a generic pattern that applies not only to sibilants but other consonants as well in many other non-Romance languages. One of the explanations is that this trend was due to the influence of Celtic articulatory habits or a Pre-Celtic substratum. Although the phenomenon extends beyond the original Celtic-speaking domains (as in Catalonia, south of Spain, and Portugal), the geographical distribution of the phenomenon largely coincides with at least some of the sections of Western Europe where Celtic languages must have been spoken around 300 B.C. In Celtic, practically any consonant is affected by lenition (Martinet 1952: 203, 214). Indeed, the linguistic term *lenition* was used exclusively in reference to Celtic languages until 1950 (Lass 2008: 91). The lenition tendency of Celtic seems to be a good hypothesis to explain these articulatory weakening processes, although its diachrony still remains undetermined. Other assumptions, far from the Celtic lenition theory, assume that each sound followed its own path or that the Western Romance consonantal development resulted from parallel evolution determined by structural analogy, assimilation, aerodynamic instability, and effort reduction. Processes to be considered lenition remain largely controversial. Among linguists, there is little agreement on the criteria for grouping a phonetic change or process under 'lenition'. Degemination, deaspiration, voicing/devoicing, spirantization, flapping, debuccalization, gliding, and the loss of sounds are commonly considered leniting processes (Gurevich 2011: 10).

The phenomenon of sibilant devoicing was frequent and became regular in intervocalic position in the evolution of Castilian. In the Middle Ages, intervocalic voiced sibilants began to merge with their voiceless counterparts, while other Romance languages (both in and out of the peninsula) such as Portuguese, Catalan, French, Italian, and Judeo-Spanish kept this voiced-voiceless contrast, as can be seen with a few examples in Table 4.

LATIN	PLATEAM	PUTEUM	CAPTIA V. CAPTARE *CAPTIARE	CASAM	CAUSAM	CAPSAM	FIXUM	FILIUM
Spanish (Madrid norm)	plaza 'square' /θ/	pozo 'well' /θ/	caza 'hunt' /θ/	casa 'house' /s/	c o s a , causa 'thing, cause' /s/	caja 'box' /x/	fijo 'fixed' /x/	hijo 'son' /x/
Old Castilian	plaça /ts/	pozo /dz/	caça /dz/	casa /z/	c o s a (cosa) /z/	caxa /ʃ/	fixo /ʃ/	fijo /ʒ/
Catalan	plaça /s/	pou ---	caça /s/	casa /z/	c o s a , causa /z/	caixa /ʃ/	fix /ks/	fill /l/
Galician	praza /θ/	pozo /θ/	caza /θ/~s/	casa /s/	cousa, causa /s/	caixa /ʃ/	fixo /ʃ/	fillo /ʎ/
Portuguese	praça /s/	poço /s/	caça /s/	casa /z/	coisa, causa /z/	caixa /ʃ/	fixo /tʃ/	filho /ʎ/
Italian	piazza /tts/	pozzo /tts/	caccia /ttʃ/	casa /z/	c o s a , causa /z/	cassa /ss/	fisso /sso/	figlio /ʎ/
French	place /s/	puits ---	chasse /s/	chez ---	chose, cause /z/	caisse /s/	fixe /ks/	fil /s/ ¹
Judeo- Spanish	praça /s/	p o d z o , pozo /z/	kaça /z/	k a z a , casa /z/	cosa /s/	caxa /ʃ/	fixo /ʃ/	fijo /ʒ/

Table 4. Examples of sibilant phonemes.

Within the general context of consonantal lenition, the devoicing of medieval Spanish sibilants is unusual, setting Spanish apart from other sister languages. The medieval voiced sibilants occurred almost exclusively in intervocalic position (Bradley 2006: 43); therefore, the devoicing

also happened mostly in that articulatory context. Nevertheless, devoicing can also occur in a plosive context, as is still the tendency in modern words such as *ciudad* ‘city’ where the final voiced *-d* is weakened, disappearing entirely, or is devoiced to [θ] or even to [h] in some peninsular dialects (Ariza 2004: 18).

Different theories have been proposed to answer the question of why devoicing happened in Castilian versus other Latin languages. Briefly, it is worth noting some of them:

- a. The low functional and lexical contrast of the sound, mainly in the case of sound [z], which did not appear often in the vocabulary.
- b. There is also the need to go forward with a phonetic system that is easier to articulate and has a higher value of functionality and balance (Ariza 2006: 19).
- c. Following the tendency of functionality, Alarcos (1951: 32) explains that it is due to a process of articulatory economy and simplification; the voiced/voiceless opposition was scarce and reduced to the intervocalic position, becoming almost redundant.
- d. Lenition could also be caused by a readjustment in the phonetic system due to the laxing of the tension or intensity of the articulation (Veiga 1988b: 59). The aerodynamic instability of voiced fricatives and affricates is explained by their limited duration and the buildup of intraoral pressure that prevent vocal-fold vibrations from continuing (Zygis 2012: 399)
- e. Similar to d), a shorter duration, in terms of acoustic and articulatory features, is another possible reason as it has been proven with laboratory experiments (Celdrán 1992: 630).
- f. Most recent research indicates that frequency, probability, entropy, and surprisal shed light upon the mechanisms of uncertainty and ambiguity in the sibilant system prior to dissimilation, following Information Theory basic principles (Zampaulo 2013: 172)³. In accordance with this approach, high and low frequency elements tend to lead language change: low frequency and articulatory complexity contribute to instability thus promoting change; furthermore, elements with extremely distinctive cues will also be unstable. Sounds and se-

³ For further information about Information Theory and Information-theoretic terms please see Shannon 1948, Cover and Thomas 2006, Goldsmith 1998, Hume and Mailhot 2013.

quences at the extreme ends of the noticeability pole are less stable. Common sound sequences would be situated away from surprisal extremes, and therefore, less prone to change (Hume 2013: 43).

- g. Amado Alonso explains that the devoicing was an internal process due to the vibration or *rehilamiento* of the sibilants within the general trend of consonantal weakening. A consonant with less vibration has less sonority (A. Alonso 1955: 379). His opinion follows Rousselot's *compensation law* in experimental phonetics, which states that in the articulation of a sound when two organs are involved if one organ gets stronger, the other weakens; therefore, if the vocal cords are very active, there will be less energy in other organs (such as the lips or tongue). This means that the voiceless sounds are stronger, thicker, and more intense than their voiced counterparts (Serrano 1982: 212). Like A. Alonso and Alarcos, Pensado agrees with intralinguistic evolution explanations for this change; however, she adds that it is not due to the weakening of the consonant but to intense friction. When there is stronger friction, there is less vibration in the vocal cords. The friction level is much more intense in the sibilants than in the rest of the fricatives. Therefore, an intense friction articulation is incompatible with the voicing (1993: 199, 214)⁴.
- h. The main factor to cause this merger was the loss of the occlusive element in sounds [ts] and [dz] according to experts like Alvar (1983: 132), Lapesa (1957: 86), Catalán (1957: 309), and Cock (1969: 13).
- i. In line with internal triggers for the devoicing, Catalán supports that it was not due to a phonetic process, but rather a shift in the phonemic system (1957: 320). Phonological systems tend towards symmetry, such that contrastive features will tend to be used in parallel across the inventory (Zygis 2012: 300). This is observed, for example, in classical distinctive feature theory (Jacobson and Halle 1956; Chomsky and Halle 1968; Clements 1985; Hall 2001).
- j. The unstable sibilant patterns are a result of the influence of the Basque language, which does not have voiced sibilants (Martinet 1955: 316). However, other experts such as Dámaso Alonso and

⁴ “Las fricativas sonoras adolecen de una contradicción intrínseca: un ruido intenso de fricación es incompatible con la sonoridad” (Pensado 1993: 214).

Alarcos disagree as Galician, *Aragonés*, and *Leonés* do not have voiced sibilants and have not been in contact with Basque (Cabrera Morales 1992: 6).

- k. Another less plausible possibility is based on the influence of the *Leonés* dialect, a theory widely rejected as the devoicing also happens in another close dialect such as the *Aragonés* (Ariza 2004: 19).
- l. Devoicing could have also happened partially due to the influence of *Mozárabe*, as proposed by Dámaso Alonso (1972: 138), or even Arabic, as is suggested by Galmés (1965: 92).
- m. The influence of the substratum explains the devoicing, following the Celtic or pre-Celtic approach.

Basically, explanations for the unstable medieval sibilant system and its results can be summarized under three main viewpoints: firstly, the influence of other languages (including the substratic hypothesis) thanks to external dynamics; secondly, intra-linguistic articulatory factors due to internal processes; and finally, a combination of these two causes. In other words, it was due to substratum by external causes, internal evolution, or a mixture of both. Without a consensus, scholars in the field vary their theories based on internal or external factors to explain the devoicing of fricative sounds ([z] and [ʒ]) and affricates ([dz], [dʒ]), which eventually created very unstable sibilant patterns in medieval Spanish and the resulting foundations for southern varieties and trans-Atlantic Spanish.

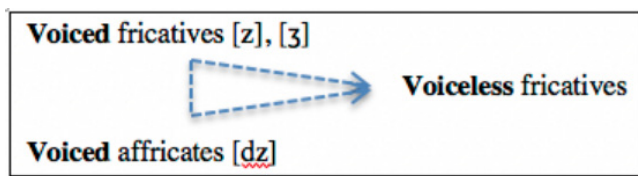


Fig. 1. Devoicing of fricatives and affricates.

1.2. Expansion of the merger: geographical implications

The traditional approach to the original localization and further expansion of this phenomenon is based on the idea that it went from the north to the south of the peninsula, following closely the increasing reach of Castilian in other non-Castilian territories. Most experts have agreed on this tendency; nevertheless, the regularity and intensity of its completion

differ according to different geographical areas. The consolidation of use was slow and intermixed in many regions.

The change of cultural and political centers in Castile in 1561, when Madrid replaced Toledo as the Court center under Philippe II's reign, influenced the speech norm dynamics. Madrid became a model site for the northern pronunciation, as the new Court speakers were associated with the innovative speech form. Meanwhile in Toledo there was still a traditional sense of the pronunciation. Many testimonies have recorded the differences between the pronunciations from Old Castile, with Madrid as its center, from those of Toledo in New Castile. In 1578, Juan de Córdoba (from Andalucia) writes:

Those from Castile say *haçer* and in Toledo they say *hazer*.
And they say *xugar* and in Toledo they say *jugar*. And they
say *yerro*, and in Toledo they say *hierro*. And they say *ala-*
gar and the others say *halagar*, and many other words that
I will skip here to avoid prolixity.

This illustrative quote shows that there were pronunciation differences within Castile itself, depending on the areas; therefore, the confusion was not at all uniformly widespread. It is strongly believed that the merger started in Old Castile, in the north, and expanded from there. It spread southward towards Toledo and from there it expanded towards the east and west: Extremadura, Murcia, Andalucia, and America.

This sudden phonetic revolution was born from a dialect area in Castile, where devoicing had existed for some time already; it was not born out of the Court speech. Speakers of the northern meseta, from Benavente to Burgos, and speakers in the Basque region followed this old Castilian practice. It is remarkable how this dialectal practice from the far north of the Guadarrama mountains attained rapid prestige among the educated classes in Philip II's Madrid and easily overthrew the traditional Toledan Court speech. This dissident practice without voiced sibilants sprang forth in Castile, and with little opposition, became the norm in the speech of the Spanish-speaking community. Parallel to the socio-political transformation of the sixteenth century in the Madrid of the Counter-reformation, this dialectal innovation succeeded in opposing the communal norm and imposing itself over the prestigious norm of the imperial Court of Toledo.

Due to the fact that the phenomenon started in the north, some linguists have defended the Basque influence in the confusion (there is almost an exclusive predominance of voiceless consonants in Basque); however, this theory of the Basque role has been discarded as the devoicing was not only characteristic of Castilian, it also affected Galician and the Leonese and Aragonese dialects, even the Valencia Apitxat variety (Cabrera 1992: 6), which were not in direct contact with Basque.

The theory suggests that the extension of the phenomenon was early in the north and from there it spread much later to the south; nevertheless, it was a very slow process with multiple intersections of contradictions supported by the textual evidence. The south was resistant to implement this new tendency from the north. This delayed feature is proven by some instances in a few dialects from provinces south of Salamanca and north of Cáceres where speakers still use some of the voiced sibilants in words such as *vecino* ‘neighbor’.

Based on textual examples, we see that the graphic confusion was not distinctively separating the northern and southern speech practices. In the sixteenth century, there are many written records by Andalusian writers such as Nebrija, Guillén de Segovia, A. de Palencia, Fernando de Herrera, and Juan Sánchez that maintained the graphic distinction, indicating that differences were still noticeable between the voiced and voiceless sounds in oral speech. For instance, in Nebrija’s *Reglas de Orthographia* (1517), he explains that there was a different level of articulatory tension, in his own words *apretado* ‘strong’ for /s/ and *floxo* ‘weak’ for /z/. Nevertheless, a century later, in the seventeenth century, another Andalusian, Mateo Alemán in his *Ortografía castellana* (1609), severely criticized those that wrote with such a graphic distinction that was nonexistent in the spoken language. On the other hand, if we consider authors from the north-center such as Teresa de Jesús (from Ávila) and Juan de Valdés (from Cuenca), some contradictions exist. De Jesús does not make graphic distinctions and she writes *tuviere, matasen, açer, deçir, dijera, teoloxia* por *tuviessse, matassen, hazer, dezir, dixera, teologia*; nevertheless, Juan de Valdés, also from Castile, explains in his *Diálogo* that he writes <ss> when the pronunciation is stronger and also writes with <z> words that some Spaniards neither pronounce nor use in writing. His examples could indicate that authors were either still trying to preserve the traditional written norm or that the devoicing had not yet spread to that area. Also, we can find early

devoicing in some southern territories as some examples from *Cancionero de Baena* (copied in Andalucía) and Fernando de Rojas's testament from Toledo in 1541 demonstrate (Cabrera 1992: 7).



Fig. 2. Expansion of Castilian (11th-15th cent.) and the spread of sibilant devoicing.

We have seen that this phonetic phenomenon of devoicing spread southward from the north of the peninsula over a long period of several hundred years during the reconquest. The expansion followed the same tendencies as the spread of the Castilian language: from the center-north towards the south, almost in a triangular shape, leaving the marginal territories for the development of sister languages: Catalan, Galician, and Portuguese. Uniformity was not characteristic of this change, and as a result, two different tendencies grew from the loss of phonemic distinction: one in the north, the Castilian norm, and another in the south, the Andalusian norm. These two phonetic trends set the foundations for major dialectal variations and for the Spanish transatlantic phase.

According to the geographic peninsular areas, and considering the articulatory complexity of the affricates /ts/ and /dz/, the neutralization of these two phonemes had different outcomes in the Castilian and Andalusian norms. /ts/ and /dz/ were weakened to dental fricative sounds [ʃ] and [z] in the south, which finally devoiced in [ʃ] and merged in [s]; while in the north /ts/ and /dz/ weakened directly to a dental sibilant sound [ʃ], which became interdental [θ] to distance itself from the resulting alveolar [s] from the pair /s/ and /z/. Therefore, these two phoneme pairs /ts/~dz/ and /s~/z/ evolved differently in the north-central and the southern parts of the peninsula: two solutions /θ/ and /s/ resulted in the north, with con-

trastive value as in *coser/cozer*, *casar/cazar*, *poso/pozo* etc.; and only one in the south, /s/, which created levelling and homonyms, the precedent for *seseo*. See Table 5.

Evolution of voiceless interdental fricative /θ/				
examples	calça 'trousers'	fizo 'did (3rd person sing.)'	cozza 'thing'	casa 'house'
graphemes	ç, ç ^{e,i}	z	-ss-	-s-
sounds	[ts]	[dz]	[s]	[z]
16th cent.	[ʃ]		[s]	
1650	[θ]		[s]	
Castilian Spanish: North-Center <i>Distinción</i>				

Evolution of Andalusian seseo				
examples	calça 'trousers'	fizo 'did (3rd person sing.)'	cozza 'thing'	casa 'house'
graphemes	ç, ç ^{e.i}	z	-ss-	-s-
sounds	[ts]	[dz]	[s]	[z]
14 th cent.				
	[ʃ]		[z]	
16 th cent.				
17 th cent.	[ʃ]			
present	[s] <i>seseo</i>		[ʃ] ≈ [θ] <i>ceceo</i>	
	Andalusian Spanish <i>Seseo</i>			

Table 5. Castilian versus Andalusian Spanish: *distinción* and *seseo*.

On the other hand, the resulting sound [s] both in the north and the south had slightly different articulations within the same alveolar point. In the north, it was pronounced with the very tip of the tongue, as api-coalveolar [ɲ]. In the south, the dorso-alveolar [s] was instead pronounced with a flatter tongue. The latter is the common resulting [s], shared with Portuguese, Italian, French, and English.

In contemporary Spanish, the *seseo* indicates that speakers use the phoneme /s/, the sole sibilant survivor of those medieval changes in the south, for graphemes <ce>, <ci>, <z> and <s>. In all dialects of standard Spanish, with or without *distinción*, modern [s] presents phonetically gradient and variable voicing in syllable final position when it is preceding a voiced consonant. Therefore, the phoneme /s/ can be realized as voiceless [s] and as voiced [z] sounds according to the context.

/s/ {	[s] e.g. <i>sí</i> ‘yes’, <i>casi</i> ‘almost’, <i>más</i> ‘more’, <i>hasta</i> ‘until’
	[z] + voiced cons. eg. <i>asma</i> ‘asthma’, <i>desde</i> ‘from’, <i>Israel</i>

It is crucial to point out that, both in the northern and southern variations, positional markedness played an important role in tracing the development of Spanish sibilants from the medieval period to the modern variations. The interior-intervocalic position is the most prone to articulatory changes compared to the strong initial word position. Syllable initial sibilants showed standard articulatory faithfulness to be voiceless, while voiced sibilants rarely occurred outside of the intervocalic pattern.

The original phenomenon of *seseo* that started as a differential Romance dialectal characteristic between the north and the south in the peninsula became a point of departure for transatlantic Spanish varieties. Consequently, the evolution of Andalusian Spanish or *andaluz*, with *seseo* as one of its main features, plays a decisive role in understanding linguistic variations in American Spanish.

1.3. *Spanish emigration to the New World: andalucismo in the precolonial period*

The development of *seseo* and *distinción* marked a very significant phase of transition in the history of Spanish. From there on, the Castilian variety will distinguish itself from other trans-peninsular variations spread

to the Americas, the Philippines, and Africa, in addition to other strategic Mediterranean sites occupied by Judeo-Spanish. The Andalusian Spanish speech will be the foundation for many modern Spanish varieties. The practice of *seseo*, mainly, and other characteristics (such as the weakening of syllable-final /s/ and *yeísmo*) from the southern dialect are commonalities for the Spanish spoken outside of the peninsula. “There are many features of American Spanish which demonstrate that southern Peninsular tendencies have successfully gained the upper hand in all or most of Spanish America” (Penny 2002: 25).

The spread of *seseo* in the new continent arrived with the first waves of Spanish colonists in 1492 and the continuous demographic settlements at the end of the fifteenth century. The initial stage started in the Antillean region, in Santo Domingo (Dominican Republic), and from the Caribbean islands began the conquest of the mainland, Mexico; from there, it continued over Central and South America. Every year there were expeditions with new settlers, mostly from Andalusia, especially coming from Seville and Huelva. Considering data on demographic distribution, gender, maritime jobs, manual-labor occupations, and economic class, the Andalusian presence was always well represented in the early phase of colonization, as Boyd-Bowman’s figures demonstrate. His findings confirm that of the 5,481 settlers studied in the early colonization period from 1493 to 1519, one in three colonists was Andalusian, one in five was from the province of Seville, and one in six was from the city of Seville itself. 60% were from Andalusia, while Extremadura, the two Castiles, Leon, and the Basques contributed roughly 6% each, and all other sources combined to 11% (1973: 3). See Fig. 3.

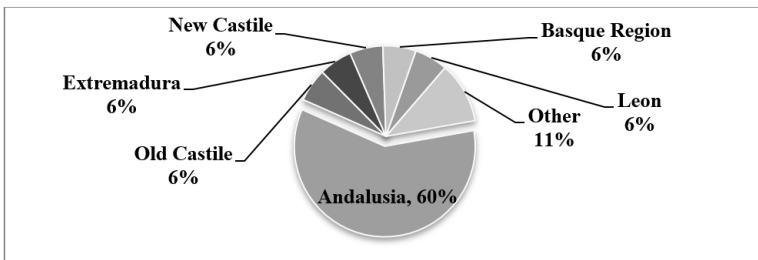


Fig. 3. Boyd-Bowman’s data: regional origins of the earliest Spanish colonists between 1493-1519 out of 5,481 settlers.

In the second stage of the colonization from 1520 until 1539, Andalusians still remained as the major immigrant group with 32% of the 13,262 colonists, followed by Castilians at 18%, and Extremadurans at 17% approximately (Boyd-Bowman 1973: 17). See Fig. 4.

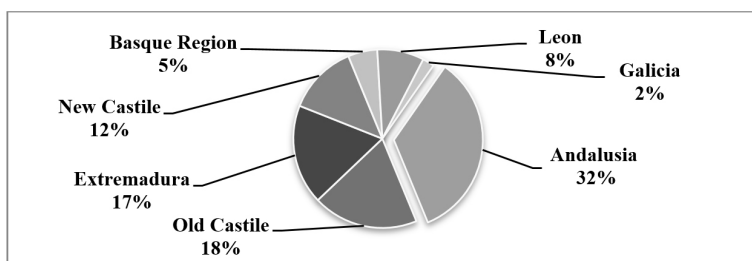


Fig. 4. Boyd-Bowman's analysis: origins of population between 1520-39 out of 13,262 emigrants.

The Spanish cities that provided more immigrants to the new world were: Seville with 58% and Huelva with 20% of all the Andalusians migrating in the initial period. In the second period, half of all emigrants were from Seville, Badajoz, Caceres, Toledo, Salamanca, and Valladolid, with Seville still furnishing one out of every six men and half of all the women. Between 1560 and 1579, roughly three out of every four emigrants came from the Southern half of the Peninsula and 28.5% were women. In later periods, Andalusian settlers lost ground principally to those of Extremadura and New Castile. Old Castile, Leon and the Basque provinces show negligible changes (Boyd-Bowman 1973: 17).

From the sociolinguistic perspective, if we consider gender and social status in the second period of colonization, Boyd-Bowman indicates that just over 6% of settlers were women. Of those, over 58% were Andalusians (34% from Seville), followed by women from Extremadura and Old Castile with over 10% each. From 1493 to 1519, one of every two women was from Seville city or the province; later on, still during the early period of colonization, it was one of every three Spanish women arriving in America. The presence of Andalusian women had a great impact on language development as they were linguistic models for the next generation, in addition to setting the precedent for the prestige of the Seville speech norm among white women in the colonia.

Regarding social standing and occupations, almost 48% of the sailors

were from Andalusia; nevertheless, positions of leadership, power, and nobility, such as governors, captains, bookkeepers, bankers, merchants, accountants, scribes, councils, priests, artisans, etc., came from Old Castile. Boyd-Bowman's data identifies a higher proportion of population in leadership from Castile, almost 20%, although that population made up just 18% of the colonists; while Andalusia provided 24% of the leaders but represented 32% of all the migrants. These numbers resemble a correspondence with modern Spanish-American dialectal distribution: those in the coastal regions show similar features to Andalusian trends, while those in the highlands, specifically in the old colonial capitals and cultural centers close to the viceregal courts, have kept a conservative linguistic tendency, mainly due to closer connections to the Peninsular hierarchy, the Court and culture of the Spanish Crown⁵.

The majority of Spanish settlers came from popular classes, which permeated the type of language that would spread in the new continent. "For every noble man that made it to the New World in the first period, 10 unrestrained men of low and dark origins would come along" (Oviedo 1959: 36)⁶. American Spanish has been recognized to be more popularly oriented than European Spanish, with a tendency to maintain archaisms, colloquialisms, and vulgar usage when compared to the literary and Court Spanish of Madrid. In many ways, in its first stages, it reflected what was happening with the common people of southern Spain in the fifteenth century, who were mostly illiterate, uneducated, and of low status, with a popular rustic speech⁷.

The colonial demographics between 1520-1539 studied by Boyd-Bowman show that the southern predominance was always present in the earliest dialect mixing in America except for Nicaragua, Venezuela, and the

⁵ Menéndez Pidal explains that marine traffic frequented the coasts with more direct, close, and persistent waves of colloquial speech from the metropolis, in contrast with those regions in the mainland interior (1962: 142).

⁶ "Por cada hombre noble y de clara sangre que pasaba al Nuevo Mundo en los primeros tiempos, venían diez descomedidos y de otros linajes oscuros y bajos" (Oviedo 1959: 36).

Opina Frago (1999: 12) que "en la emigración a Indias predominó con mucho el elemento popular"; y escribe Zamora Vicente (1967: 378) que "el fondo patrimonial idiomático aparece vivamente coloreado por el arcaísmo y por la tendencia a la acentuación de los rasgos populares." Añade Álvarez (1987: 35) que "el grueso de la población española que llegó en un principio a nuestras playas, y en términos más amplios a las de América en general, pertenecía a las clases populares."

⁷ "El *pueblo* que se desgajó de España para poblar América [...] estaba compuesto de

New Granada Kingdom (now Colombia) where Castilians were the largest group. In other continental territories, the most important colonist groups were approximately as follows in percentage and numbers (Boyd-Bowman 1973: 27-32).

	Colonists	Andalusians	Old Castilians	New Castilians	Extremadurans	Basques
Santo Domingo (Dominican Republic)	1,372	45.6% 626	13.4% 184	10.8% 146	12.8% 175	3.4% 46
Cuba	195	41% 80	17.4% 34	7.2% 14	15.9% 31	3.1% 6
Puerto Rico	108	26.9% 29	30.6% 33	1.9% 2	14.8% 16	5.6% 6
México	4,022	35% 1,412	17.3% 693	12.6% 507	14.8% 598	4.4% 177
Panama area	958	33% 316	14.8% 142	11.3% 109	22% 211	6% 57
Guatemala and Chiapas	467	25% 119	21.7% 101	7.5% 35	22.7% 106	3.9% 18
Perú	1,340	22.2% 297	22.2% 298	13.9% 186	20.4% 274	5.5% 74
La Plata River	1,088	41.3% 449	14.7% 160	9.9% 107	6.3% 69	4.9% 53
Asuncion (Paraguay)	145	33.9% 49	13% 19	9% 13	1.4% 2	9.7% 14
New Granada (Colombia)	906	18% 163	20.5% 186	13.8% 125	12.7% 115	5.7% 52

Table 6. Boyd-Bowman's data: regional origin of the earliest Spanish colonists of America between 1520-1539.

Thanks to Boyd-Bowman's extensive geo-demographic records proving that Andalusians outnumbered other groups in the early stages of the colonization, the impact of the southern peninsular dialects in the configuration of Spanish in its early days in the New World is undeniable. Anda-

rústicos, villanos, artesanos, clérigos, hidalgos, caballeros y nobles, aproximadamente en la misma proporción que el *pueblo* que se quedó en España" (A. Alonso 1967b: 15).

lusian was indeed the most important influence in precolonial American Spanish; an assumption that initiated the *andalucista* theory supported by modern scholars⁸.

During the fifteenth and sixteenth centuries, two main cities in Andalusia had control of all the commercial traffic to the Indies: Seville and Cadiz. Since the House of Trade, la *Casa de Contratación*, was in Seville, many settlers came from the city itself. If they came from other areas in the peninsula, they lived in Seville, sometimes many years, before embarking for the Americas. Natives or not, most emigrants had to stay lengthy periods in Seville. Furthermore, they spent weeks aboard ships on their transatlantic journey, providing more opportunities to permeate other settlers' pronunciation habits before arrival. Among Sevillian innovative speech patterns at the end of the fifteenth century, the *seseo* was the predominant one and was directly transferred to the Canary Islands and to American soil. Even those linguists that reject the *andalucista* theory of American Spanish accept the *andalucismo* of the *seseo*, as the most frequent feature in all colonial documents, including those from South America. They concur that *seseo* could not have been developed independently from peninsular Spanish. Furthermore, they accept this phonetic trend as a *sevillanismo* proper (Moreno de Alba 2007: 48)⁹.

In the sixteenth and seventeenth centuries, two southern cities, Seville and Cadiz, monopolized all the maritime traffic between Spain and the Indies. This was a time of profound changes; not only in socio-politics but also in the way people were speaking. The pronunciation was changing on both sides of the Atlantic with Seville as the meeting point for departure to the colonies. Seville became the only hub for travelling to America, the link between the Old and the New Worlds. The first creoles to speak Spanish were mainly exposed to the Seville and Andalusia varieties as a consequence of demographics and commercial sailing logistics¹⁰.

⁸ Most linguists agree on the *andalucista* theory; however, Henríquez Ureña first opposed it based on the idea of multiple causation, or *polygenetic theory*, claiming that similarities on both sides of the Atlantic are due to parallel independent developments. Henríquez Ureña, in line with Amado Alonso, does not accept the *andalucismo* of American Spanish; they believe that the Andalusian presence was not clearly predominant over all colonial America. See Noll (2005).

⁹ "Ese importante rasgo fonológico no puede explicarse como algo autóctono ni de Canarias ni de América, sino como un verdadero sevillanismo" (Moreno de Alba 2007: 48).

¹⁰ "Sevilla y Cádiz monopolizaron durante los siglos XVI y XVII el comercio y relaciones con Indias. En un momento en que la pronunciación estaba cambiando rápida-

Based on Boyd-Bowman's conclusions that in the initial Antillean period by far the largest single group, in every year, and on all major expeditions, was the Andalusians, the *seseante* speech has been recognized as the most significant linguistic item of the Andalusian influence in American Spanish. Once in America, in the early American-Spanish koiné, the *seseo* was adopted by colonists from all parts of the Peninsula as a result of dialect contact and mixtures. The northern norm opposition of /θ/ and /s/ came to have little to no impact in areas of mixed speech during precolonial and colonial times, even though there were continuous waves of settlers coming from Old and New Castile and other regions during the sixteenth century¹¹. In this environment of dialect mixing, most speakers would simply adopt one feature to facilitate communication, making it the norm, instead of making a new but unpredictable distinction¹². Mergers are more frequent in the case of dialect mixture. Consequently, the pair [θ]/[s], pronounced by these early Castilian colonists, became less resistant to merger, and the result was the continuation and spread of *seseo* in the Americas.

The linguistic background of early colonial times was a dynamic one including the following aspects: the predominantly Andalusian mix of settlers from all the regions of Spain, migratory shifts, dialect mixing, languages in contact (including Amerindian ones), and the growing social prestige of Spanish. The language varieties of those first colonists in long-term contact went through adaptive processes and periods of accommodation. Colonists adjusted their speech, sometimes by eliminating minor variants, reproducing salient features in the speech of others, or mixing variants. In speech variety contact situations, it is common to encounter a gradual tendency to reduce, level, simplify and regularize one variant from a group of competing variants, a process known as

mente a ambos lados del Atlántico, Sevilla fue el paso obligado entre las colonias y la metropoli, de modo que para muchos criollos la pronunciación metropolitana con que tuvieron contacto fue la andaluza" (Lapesa 1981: 586).

¹¹ Danesi's data points out that Boyd-Bowman's studies on 5,481 settlers in the early colonial period only represent 2.74% of the 200,000 immigrants that arrived in the sixteenth century (1977: 192-3).

¹² Tuten points out that "the regularization of *seseo* [...] occurred as part of a particularly far-flung process of roughly simultaneous koineization(s) [...] The inherited tendencies or structural features were the weakly-marked phonemic distinction and incipient neutralization. In the koineizing context(s), speaker-learners everywhere could easily have generalized the merger and thereby established it as a new norm" (2003: 264)

koineization. The *koine* becomes the common or standard variety of a larger area where there are opportune conditions for dialect mixing and levelling.

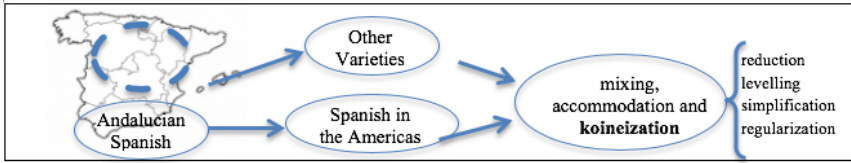


Fig. 5. Settler mixing and *koineization*.

Demographics and migration patterns must be carefully considered to describe the spread of Spanish in America in precolonial times. The impact of the Andalusian influence in the linguistic foundations of the New World has been highlighted; however, what was Andalusia like at the end of the fifteenth century? Being the most southern part of the peninsula, it was the latest to be reconquered from the Moors, and as a result, it was also the latest to be re-settled by Christians from the northern territories, which resulted in a repopulation shift with a consequent linguistic environment of speech and dialect levelling. The Andalusian speech of this period was far from standardized; it developed from a *koine* of mainly Castilian with Arabic and Mozarabic elements, from which it borrowed multiple lexical voices that are still present in modern southern Spanish.

Due to sociopolitical circumstances, transatlantic enterprises, maritime economics and trade, human mobility, and demographic convergence, Andalusian became the pioneer dialect. It was the language variety spoken in Seville, not the one from Toledo or Madrid, that set the first linguistic norms in the colonization of the New World; furthermore, in the first stage of colonization, it was the Spanish *koine* from the peninsula with many *antillanismos* that was taken to the main land by the first conquerors (Boyd Bowman 1964: 24-25)¹³. A century after the disco-

¹³ “En cuanto a la colonización del Nuevo Mundo fue el lenguaje de Sevilla, no el de Toledo o de Madrid, el que estableció las primeras normas [...] La época inicial o antil-

very, the growing political importance of Seville was discarded by the preeminence of Madrid as the new capital. Old Castile centralization seriously impacted the competing linguistic norms. The reputation of the Toledo norm as the traditional stronghold of ‘good Castilian’ (as Menéndez Pidal describes it¹⁴) was replaced by the emergent innovative Madrid norm, which became the prestige norm from 1560. From this background the Andalusian dialect arose, grew, and expanded.

15th cent.	Linguistic Norms	16th cent.
Toledo (Court center until 1560) →	Traditional Castilian	Madrid (capital) new prestige norm
Madrid →	Innovative Castilian	
Seville (America trade)	Andalusian dialect	Andalusian dialect

Table 7. Linguistically significant cities in Spain during the 15th and 16th centuries.

2. Diachronic review and alternative accounts: phenomenon propagation and completion

By the end of the sixteenth century, most areas under Castilian influence had finally eliminated voiced sibilants from the spoken language. This chronologic framework is generally accepted and in accordance with the opinions of grammarians and treatise-writers, as well as attestations and graphic misspellings from documented records. Nevertheless, polemics arise when dating the origin of the phenomenon in its phase of transatlantic displacement. Was *seseo* a well-established trait in the Andalusian *koiné* at the end of the fifteenth century? Did the sibilants suffer from phonetic devoicing around the same time? Was this revolutionary phonetic shift the result of diachronic processes such a ‘falling domino’ effect or push/drag phenomena in Martinet’s sense of push chain (*chaîne de propulsion*) and drag chain (*chaîne de traction*)¹⁵?

lana está claramente dominada [...] por las provincias andaluzas Sevilla y Huelva y que fue precisamente la koiné española insular desarrollada en aquel tiempo, con su caudal de antillanismos la que llevaron consigo desde las islas los primeros conquistadores de Tierra Firme” (Boyd Bowman 1964: 24-25).

¹⁴ “La revolución de fines del siglo XVI no fue [...] sino la última y decisiva batalla librada por una norma dialectal castellana vieja contra el prototipo lingüístico cortesano toledano” (Menéndez Pidal 1962: 101).

¹⁵ Martinet’s push/drag chains explain a rationale for phonological changes in a language over time. The structure of a language requires relationships between its units in the sys-

The devoicing and evolution of these sibilants did not happen at the same time and was not homogeneous. Experts do not unanimously agree on the chronology of the changes; however, some general consensus can be extracted from their hypotheses. The departure point rests on the assumption that it was the Old-Castilian ‘system’, the ‘innovative’ norm of a language without voiced sibilants, imposing itself on Madrid and Toledo and displacing the old Toledo Court system in the last third of the sixteenth century at the latest. It is not a question of transformation or evolution in speech but of the imposition of a foreign practice (Catalán 1957: 287).

The chronology of the devoicing goes hand in hand with the spread of the phenomenon southward, expanding from a focal point towards surrounding peninsular territories. It is important to remember the following brief steps in its history:

- a. During the medieval ages, there was a clear distinction between voiced and voiceless sounds as has been recorded in written documents from the times of Alfonso X in the thirteenth century. Before that time, such graphic difference cannot be attested due to the lack of records.
- b. From the end of the thirteenth century until the orthographic reform instated by Nebrija in the fifteenth century, there were some instances of devoicing, especially affecting the pair /s/~/z/; however, it is difficult to prove due to the graphic instability throughout the Middle Ages that occurred, despite Alfonso X’s orthography standardizing efforts. Nebrija consolidates the grapheme <ss> for the voiceless sound [s]. There are also a few examples of devoicing of the pairs /ts/~/dz/ and /ʃ/~/ʒ/ studied by Menéndez Pidal (1919: 27-29) such as *façer* (alternating with *fazer*), *raçon*, *deçir*, *rayçes* in a Mountain document from 1410, together with *usso~uso*. Similar cases appear in the fifteenth century manuscript 64 of the National Library of Madrid, such as *raçones*, *diçesse*, *desfiçiesse*, *diçen*, *pobreça*, *façian*, *façienda*, *tristeça*, *bajas*, *baja*, *linguaxe*.

tem; any change may potentially initiate a chain of derivative changes, in the end giving rise to drag chains and the like. He claims that phonemes (as autonomous units) move around in response to internal pressures generated by the interaction of function, structure, economy, and the natural asymmetries of the speech organs. The inception of sound change is gradual and imperceptible, a continuous process in which the allophonic norm of a phoneme assumes a new position by infinitesimal steps (1955: 48-49).

In the *Oraçional de Cartagena*, from the mid-fifteenth century, many examples of graphic confusion were recorded for the sounds [s] and [z] as in *casa~cassa*, *causa~caussa*, *esposa~espossa*, *guisa~guissa*, *inposible~impossible*, *invisibles~invessibles*, *nescasarias~neçessarias*, *pasiones~passiones*, *pasar~passar*, *paso~passo*, *progreso~progresso*, *vasos~vassos*, etc. In *Arnalde and Griselda* by Diego de San Pedro, published in 1492, there are similar examples: *eso*, *necesidad*, *diese*, *sobrase*, *pasión* en lugar de *esso*, *necessidad*, *diesse*, *sobrasse* and *passión*, etc. (Cabrera 1992: 4).

- c. At the end of the fifteenth century and beginning of the sixteenth, in the pre-classic period, many more illustrative cases of the devoicing occur in written texts. However, it is the beginning of the spread of the phenomenon as many grammarians, treatise writers and rhymes of that period still confirm this distinction. Furthermore, we have the Judeo-Spanish linguistic petrification from the 1492 expulsion as a testimony to the existing opposition between voiced and voiceless sibilants at the end of this century.
- d. At the end of the sixteenth century the phenomenon spread to more linguistically conservative peninsular areas and got consolidated as a general speech practice. It was in the south where its completion was most delayed.
- e. By the beginning of the seventeenth century there were no voiced sibilants in the standard speech.
- f. The devoicing happened first in the north from early periods; while in Toledo it was a wide spread phenomenon from the mid-sixteenth century and was not generalized until the seventeenth century.
- g. The merger of the prepalatal fricative pair /ʃ/~ʒ/ gives way to a new velar sound [x]. The [ʃ] articulation retreated to the velar area to become the velar fricative [x]. Some treatise writers and grammarians attest this at the end of the sixteenth century. Torquemada, López de Velasco, and Oudin report that the sounds represented by the letters <x>, <j> and <g^{e.i}> were articulated close to the throat, which implies that both the palatal and velar pronunciation coexisted at this time.

In the seventeenth century, there are a few descriptions of this velar pronunciation. Jiménez Patón and Robles confirmed it; the latter writes that the sound for the letter <x> was pronounced with the

tongue far in the mouth, almost twisted towards the throat, which indicates the modern velar realization¹⁶. Correas still explains the articulation of this grapheme as palatal; however, being from Extremadura, his description could denote that the spread of velarization was not yet general in his southern region (Blanco 2006: 85).

It is difficult to determine the exact date for the triumph of the velar sound [x] in the standard speech, as there is not much written documentation about this process. The general conclusion is that the palatal articulation was dominant during the sixteenth century and started to change at the end of it. After a long coexistence period of palatal and velar pronunciations, well advanced into the seventeenth century, the change from [ʃ] to [x] took place and the velar [x] became the norm. Nevertheless, the realization of this velar sound in the south became aspirated as a [h], merging with the aspiration descending from the initial Latin F-, while in the north, the descendent of the prepalatal fricative pair favored a more intense articulation as an uvular fricative sound [χ]. This continues as a modern contrast between northern and southern dialects.

- h. Most linguists agree that the velarization of sounds [ʃ]~[ʒ] also has its origin in the north of the peninsula from where it spread southwards; however, from the chronological point of view, it was the devoicing (of [z]) that preceded the velarization in this area. In the center-southern regions both phenomena probably extended simultaneously (Alarcos 1988: 56)¹⁷. See Table 8.

North	1st	/s/~/z/ > /s/	
	2nd	/ʃ/~/ʒ/ > /x/	ej. <i>casa</i> [káza] > [kása]
Center-southern areas	Simultaneously	/s/~/z/ > /s/	ej. <i>dixo</i> [díʃo] > [díxo] <i>dijo</i>
		/ʃ/~/ʒ/ > /x/	

Table 8. Chronology of devoicing and velarization.

¹⁶ Robles writes: “se pronuncia entrándose la lengua tan adentro, que casi se dobla hacia la garganta” (in Blanco 2006: 85)

¹⁷ “La desonorización debió de preceder en el norte al reajuste del punto de articulación; en las zonas centro-meridionales, donde el ensordecimiento se propagó desde el norte, lo mismo que la velarización, es posible que los dos fenómenos fueran simultáneos” (Alarcos 1988: 56).

- i. The confusion of the affricate sounds [ts]~[dz] evolved through various steps of spirantization (loss of their initial occlusive elements [t]~[d]), devoicing (loss of [z]) and interdentalization (creation of a voiceless interdental [θ]) with different results in the north (*distinción*) and the south (*seseo* and *ceceo*). The spirantization happened first with the voiced [dz] around the mid-sixteenth century, while it affected the voiceless [ts] at the end of the sixteenth century. At the beginning of the seventeenth century both the spirantization and devoicing were complete, although there were some educated minority groups that made the distinction between sounds [ts] and [ʃ] (based on their articulation as affricate/fricative, not voicing) until the twenties of the seventeenth century.

The interdentalization was happening at the end of the sixteenth century as is mentioned briefly by some writers; however, it took a long time to spread, and in the seventeenth century was still a minor phenomenon (Blanco 2006: 86). See Fig. 5.

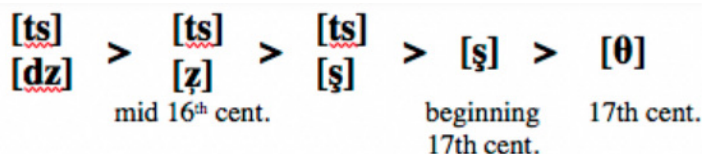


Fig. 6. History of the sound [θ].

Venegas and Valdés's testimonies confirm the distinction between sounds [ts] and [dz] until the mid-sixteenth century. After that date, other writers such as Torquemada and López de Velasco describe the sound represented by the letter <z> ([z] < [dz]) as being fricative. There are no more references to the spirantization of [ts] until the end of the sixteenth century when López de Velasco writes about it. Nevertheless, in the seventeenth century Correas, Bravo Grájera, Jiménez Patón, Luna, Pérez de Nájera, and Villar inform us of the merger of the sounds of both letters <ç> and <z>. Still other grammarians like Alemán and Bonet attest the distinction (at that point of sounds [ts] and [ʃ]), criticizing the confusion as a common practice; in the same line, Sebastián, Dávila, and Cascales add that the pronunciation of <ç> and <z> is different but very close. These late testimonies of distinction in the seventeenth century contradict the

opinion of most writers; the experts are inclined to believe that it was a conservative trend to resist innovation (Blanco 2006: 81).

A. Alonso supports the idea that the opposition of voicing lasted longer, until the end of the sixteenth century¹⁸. In the same line of thought, Lapesa points out that in Toledo the distinction between sounds [ts] and [ʃ] did not survive the first thirty years of the seventeenth century¹⁹. Catalán discards the idea that the opposition was functioning after having lost the voicing; likewise, Cano Aguilar defends that, without the voicing contrast, there was no distinction in the manner of articulation (Blanco 2006: 83).

According to treatise-writers, the evolution of sounds [ts]~[dz] had its key period between the middle of the sixteenth century and the beginning of the seventeenth century. At that time, the distinction and the merger co-existed, that is to say, in some regions the sound [ts] kept the old affricate pronunciation while in others it was fricative [ʃ]; in some areas, the [z] was still voiced while in others it was already voiced [ʃ]. The distinction was articulated by a few and taught by a limited group of grammarians, while the confusion was practiced among most people and recorded by the vast majority of writers.

See the continuation of this article in Part II, appearing in the next regular volume of *Estudios Hispánicos*.

¹⁸ “La sonoridad se perdió en el último tercio del siglo XVI [...] La oposición ç-z siguió siendo funcionante después de haber perdido su marca única de oposición, la sonoridad” (A. Alonso 1955: 317)

¹⁹ “Durante algún tiempo se mantuvo un resto de oposición entre la /ts/ (escrita c o ç) y la fricativa, sorda ya también, prodecedente de /dz/, y transcrita con z; pero esta diferencia no sobrevivió al primer tercio del siglo XVII, y la igualación en /θ/ fue completa” (Lapesa 1981: 374)

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Abbreviations

mod.	modern
ca.	abbreviation for Latin <i>circa</i> , approximately
Cat.	Catalan
Lat.	Latin
med.	Medieval
O. Fr.	Old French
O. Sp.	Old Spanish
*	Vulgar Latin, not recorded or documented
< >	letters, graphemes
[:]	semicolon indicates a long sound

- [] sounds, allophones: variations of a phoneme with no contrastive value. E.g. [s] and [z] in modern Spanish are allophones of the phoneme /s/, e.g. *hasta* [ásta] and *asma* [ázma].
- [s̺] IPA. Apicoalveolar fricative voiceless consonant sound; dialectal in north of Spain.
- // indicates phonemic transcription, a broader transcription than phonetic transcription. Symbols contained within have contrastive value, e.g. /s/, /z/ as *sip* /sip/ and *zip* /zip/ in English.